

REMARKS

Claims 1-28 are pending. No new claims are added and no claims are cancelled or amended. Applicant thanks the Examiner for the indication that claims 6 and 7 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Objections – Specification

The Abstract of the Disclosure was objected to because of informalities. The Abstract has been amended so that it is in narrative form and limited to a single paragraph not exceeding 150 words in length.

Claim Rejections – 35 U.S.C. § 102

Claims 1-5 and 8 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,443,466 to Brakewell. Applicant respectfully traverses the rejection for at least the reasons set forth below.

The jig pattern disclosed by Brakewell is used as a template for *making cut outs* from pieces of wood. (Col. 3, ll. 15-29.) These cut outs can then be used as the front and back pieces of a musical instrument. (Id.) The Brakewell jig pattern is not, however, used for *assembling* musical instruments. In contrast, claim 1 recites a method of assembling a musical instrument by providing first and second assembly jigs that are adapted such that the free edge of a side wall component is inserted into a groove or rebate of a major panel of the musical instrument when the jigs are brought together.

The Examiner contends that Brakewell discloses a method of assembling a musical instrument having a first major panel and a side wall, the first major panel including a groove or rebate cut into the panel according to a predetermined pattern, comprising the steps of providing a first assembly jig adapted to support the panel and laying the panel on the first jig. (Office Action, pp. 3-4.) In fact, Brakewell does not disclose these limitations. Rather, Brakewell provides for "a jig pattern 1 for use in conjunction with a router type copying machine" to produce the major panels of an instrument, such as the top and bottom members. (Col. 3, ll. 15-19.) Brakewell further describes how this jig pattern can be used to replicate instrument panels:

This jig pattern is placed on the router, and on the work place of the machine is placed a piece of wood from which a top or bottom member is to be made. The cutter of the machine engages the wood as the copying point is placed in the outermost groove 2 of the jig 1 and taken round its periphery. This cuts out from the wood a piece of material of the approximate shape of the box [such as the body of the instrument] to be formed.

The copying point of the router is then placed in the inner groove 3 and again the cutter is brought into contact with the wood, this time to cut a groove in the top or bottom member to receive one edge of a box side or rib 8 (FIG. 4).

(Col. 3, ll. 22-29.) Brakewell thereby requires that the jig pattern is placed on the router such that the "copying point" can follow the grooves in the jig. The piece of wood is placed at a "work place" of the machine - separate from the location of the jig pattern - where the "cutter" then forms the shape of the panel and of the groove. The jig pattern is, accordingly, separated from the piece of wood which is to form the panel of the instrument. The panel, however, is not placed upon the jig pattern. In this manner, the Brakewell jig pattern is merely a cutting template rather than an assembly jig adapted to support the panel during construction of the instrument.

Consequently, the Brakewell jig pattern does not and cannot *support the panel* as claimed in claim 1 of the present application.

Brakewell also teaches away from the use of assembly jigs in assembling musical instruments. For example, Brakewell provides that “the side rib [is] maintained in position by the grooved liner strips *without the use of any jigs or the like to maintain the shape of the box during the setting of the joints.*” (Col. 1 lines 20-23 (emphasis added).) Brakewell also provides that “the method of this invention *obviates the use, heretofore regarded as essential in the production of musical instrument sound boxes, of a jig for each instrument for bending previously machined ribs [i.e., side walls] to the required shape and maintaining the shape during attachment of liner and blocks....*” (Col. 1 lines 40-45 (emphasis added).) Similarly, Brakewell further provides that “one simple jig pattern is required for each shape required instead of, as heretofore, a *costly assembly jig for each instrument in simultaneous production.*” (Col. 2 lines 39-42 (emphasis added).)

In contrast to the use of a single jig pattern described by Brakewell for producing panel copies, the method recited in claim 1 for assembling a musical instrument comprises the step of providing a first assembly jig and the step of providing a second assembly jig. The additional cost of these jigs can be outweighed by the advantages provided by the assembly method. Brakewell thus fails to teach the limitations of claim 1.

The Examiner also contends that Brakewell discloses the steps of providing a second assembly jig (citing reference numeral 9) adapted to hold the side wall in a configuration corresponding to a predetermined pattern of the groove or rebate and placing the side wall into the second jig such that a free edge of the side wall substantially follows the predetermined pattern. (Office Action, pp. 3-4 (citing col. 3, ll. 54-57 & Fig. 4).) The portions of Brakewell relied upon in the Office Action, however, fail to disclose the second assembly jig recited in claim 1. In particular, the statement that "Fig. 4 shows one end of a musical instrument with a rib 8, mounted on a *bottom member* 9 with the aid of a liner 10, the rib 8 being bent to shape, inserted in the groove, and glued in position," (col. 3, ll. 54-57 (emphasis added)), does not disclose either of the assembly jigs recited in claim 1. Rather, reference numeral 9 in Brakewell refers to the bottom member (in other words, one of the major panels) of the instrument. The bottom member is formed using the cutting template shown in Brakewell as Figure 1. Also, the bottom member is not an assembly jig and is not adapted to hold a side wall in a configuration corresponding to the predetermined pattern of a groove or rebate in a bottom member or in a top member of the instrument. Furthermore, Brakewell does not disclose placing the rib into a jig pattern such that a free edge of a side wall substantially follows a predetermined pattern of a groove in a bottom member or a top member. Instead, Brakewell teaches away from this, suggesting that the use of such a jig should be avoided because of the additional expense involved. (Col. 2, ll. 35-42.)

In contrast to Brakewell, claim 1 recites providing a second assembly jig adapted to hold the side wall in a configuration corresponding to the predetermined pattern of the groove or rebate. For example, Applicant's Figures 3-5 depict how a groove (reference numeral 22) in the holding jig (reference numeral 20) and pairs of support pins (reference numerals 24 and 26) which are adapted to hold a side wall (reference numeral 28) perpendicular to the face of the jig can permit the jig to hold the side wall in a configuration corresponding to the predetermined pattern (which is also the shape of the instrument).

The Examiner further contends that Brakewell discloses the steps of applying adhesive to the groove or rebate, bringing the jigs together such that the free edge of the side wall is inserted into the groove or rebate, and applying a compression force across the first and second jigs to urge the side wall into the groove or rebate. (Office Action at 3-4 (citing Brakewell col. 3, ll. 45-67).) The cited portions of Brakewell, however, fail to disclose that a compression force is applied across two jigs as recited in claim 1. Rather, Brakewell provides that a "liner is inserted in the channel with its groove facing downwards. The upper face of the liner is then glued, and a top or bottom member lowered on to it and pressed into contact." (Col. 4, ll. 42-45.) In other words, Brakewell provides that the compressive force is applied directly to the grooved members.

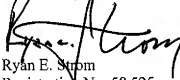
In contrast, claim 1 recites applying a compression forces across the first and second jigs to urge the side wall into the groove or rebate. For example, Applicant's Figure 6 depicts elastically clamped clamps (reference numeral 36) positioned around the perimeter of a second assembly jig (reference numeral 20) which serve to apply a compression force between the second assembly jig and a first assembly jig (reference numeral 10).

Therefore, Brakewell does not anticipate the method of assembling a musical instrument recited in claim 1. For at least the foregoing reasons, claim 1 is allowable. Claims 2-8 depend from claim 1 and, therefore, are also allowable for at least the same reasons.

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,



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